

Work Order ID 148446

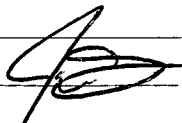
148446

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Thursday, June 30, 2016 11:45:42 AM

Item ID: D5350-041-1 Accept *N900040100* Setup Start *NS1*
 Revision ID: R66 FWD BEAM Stop *NS2*
 Item Name: Fwd Beam Assembly
 Start Date: 07/04/2016 Start Qty: ~~2.00~~ 1.00 *2* Cust Item ID:
 Required Date: 08/03/2016 Req'd Qty: 1.00 *1* Customer:

Reference:

Approvals: Process Plan:  Date: _____ Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D5350	B

100 0.01

100  0.03 

Bandsaw Memo

Jeaspa Bandsaw CUT BLANK 67.63" N/A

110 0.06

110 0.50  06/07/02

HAAS 1 WATER JET Memo

HAAS CNC vertical machine #1 MILL AS PER FOLIO FB _____ AND DWG D5350

AS PER ATTACHED FOLIO REV: _____

E-MAIL. DWG REV: _____

4/11/16 06:30 DEBURR

4/12/16 06:30

4/12/16 06:30

4/12/16 06:30

4/12/16 06:30

4/12/16 06:30

4/12/16 06:30

4/12/16 06:30

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4/12/16 06:30

4/12/16 06:30

4/12/16 06:30

4/12/16 06:30

4/12/16 06:30

DAS
68-3
2-2
5-89
SVO

16-07-00

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Item ID: D5350-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fwd Beam Assembly
 Start Date: 07/04/2016 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 08/03/2016 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC2- Inspect parts off machine FA/FAIB	0.00							DAS 32 9-89
120									
QC	Memo	0.00							
Quality Control									16-07-06
150	QC8- Inspect parts - second check	0.00							DAS 9 9-89
150									
QC	Memo	0.01							
Quality Control									
160	Chemical Conversion Coat per QSI005 4.1	0.00							
160									
HandFinish	Memo	0.07							
Hand Finishing									

N/A AS PER
E-MAIL.
GR

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Item ID: D5350-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fwd Beam Assembly
Start Date: 07/04/2016 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 08/03/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 *170* QC Quality Control	QC7-Inspect Chemical Conversion Coat Memo	0.00 0.00							
171 *171* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum Memo MASK HOLES AS PER NOTE 8 START TIME: _____ OVEN TEMPERATURE: _____ FINISH TIME: _____	0.00 0.05							
172 *172* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00							

N/A for
per E-MAIL

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Thursday, June 30, 2016 11:45:42 AM

Item ID: D5350-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fwd Beam Assembly
Start Date: 07/04/2016 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 08/03/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	QC21- Final Inspection - Work Order Release	0.00							
210									
QC	Memo	0.03							
Quality Control									

RD 16-10/6-01.

U 1607.20

Picklist Print

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Work Order ID: 148446

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Parent Item: D5350-041

D5350-041

Parent Item Name: Fwd Beam Assembly

Start Date: 07/04/2016

Required Date: 08/03/2016

Start Qty: 2.00

Required Qty: 1.00

NAS1149D0316J

Purchased

No

Each

1,624.000

8

NAS1149D0316.I

Washer

Location

Loc Qty

Loc Code

ST264

1624

M134502

1624

Picklist Print

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Thursday, June 30, 2016 11:45:41 AM

Work Order ID: 148446

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Parent Item: D5350-041

D5350-041

Parent Item Name: Fwd Beam Assembly

Start Date: 07/04/2016

Required Date: 08/03/2016

Start Qty: 2.00

Required Qty: 1.00

AN3-13A Purchased No

Each 58.0000 4

AN3-13A******

Bolt

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
GA	20	
m127070	20	
ST349	38	
m134365	38	

MS21042L3 Purchased No

Each 1,713.000 4

MS21042L3******

Nut

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
CCK007	600	
m135056	600	
FP001	32	
m133790	32	
GA	158	
m133790	3	
m134360	155	
ST303	923	
m134039	12	
m134634	2	
m134754	109	
m134943	800	

MS17984-C412 Purchased No

Each 1.0000 4

MS17984-C412******

Pin, Quick Release

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST315	1	
m130358	1	

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Shop Packet Print

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D5350-041

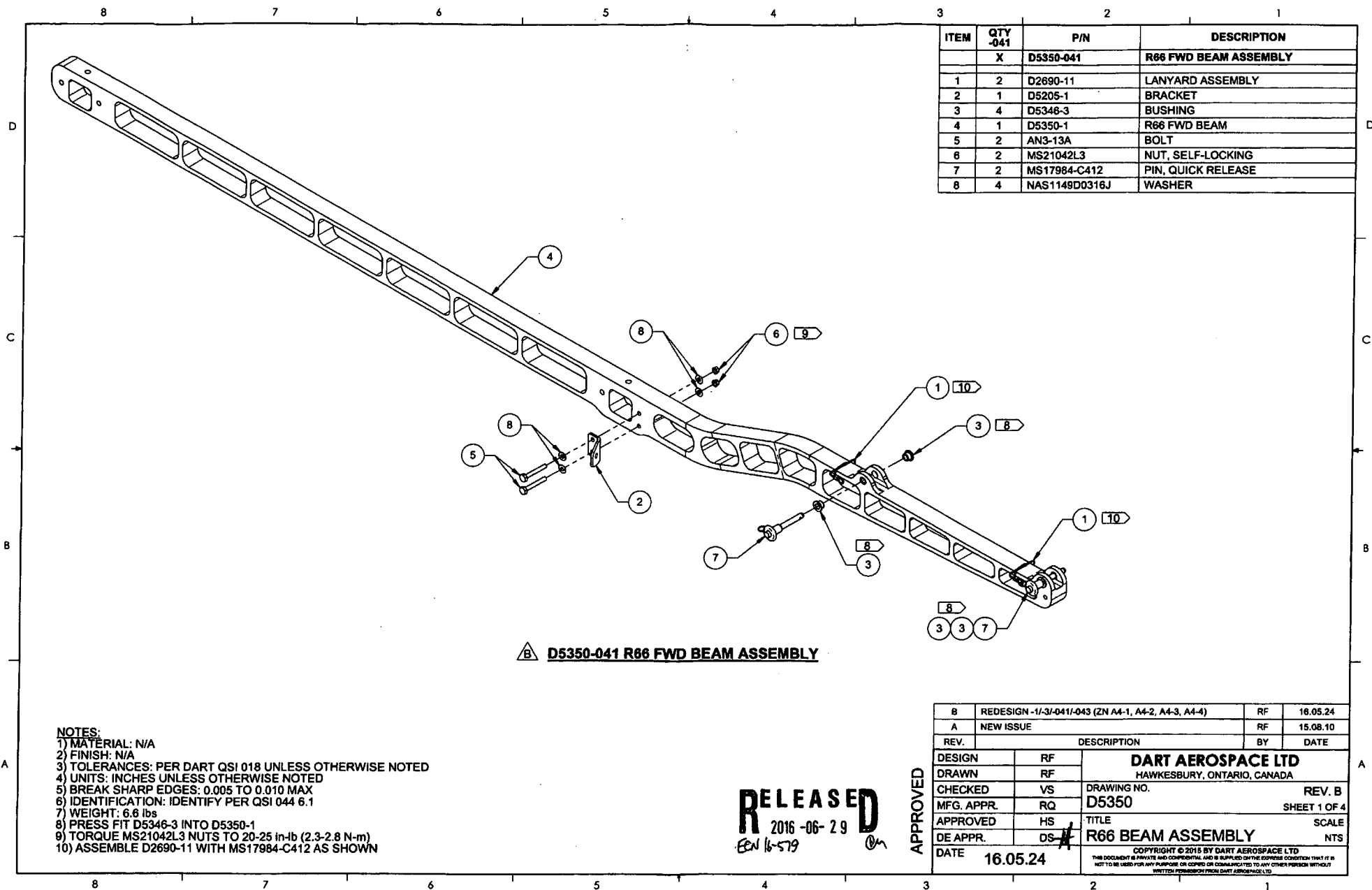
Required Date: 08/03/2016

Required Qty: 1.00

IPP REV:C

16.06.30 DWG REV.B DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.000X06.00 0		Purchased	No				f	26.7810		11.87368			
M6061T6B1 000X06 000										**			
6061T6 BAR 1.00 X 6.00													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				MAT003				26.781					
				m125771				0.53					
				m127797				5.001					
				m130013				1.42					
				m134677				12					
				m134703				7.83					
D2690-11		Manufactured	No				Each	0.0000		4			
D2690-11										**			
Lanyard Assembly													
D5205-1		Manufactured	No				Each	2.0000		2			
D5205-1										**			
Bracket													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST157				2					
				139876				2					
D5346-3		Manufactured	No				Each	0.0000		8			
D5346-3										**			
Bushing													



ITEM	QTY -041	P/N	DESCRIPTION
	X	D5350-041	R66 FWD BEAM ASSEMBLY
1	2	D2690-11	LANYARD ASSEMBLY
2	1	D5205-1	BRACKET
3	4	D5346-3	BUSHING
4	1	D5350-1	R66 FWD BEAM
5	2	AN3-13A	BOLT
6	2	MS21042L3	NUT, SELF-LOCKING
7	2	MS17984-C412	PIN, QUICK RELEASE
8	4	NAS1149D0316J	WASHER

B D5350-041 R66 FWD BEAM ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 6.8 lbs
- 8) PRESS FIT D5346-3 INTO D5350-1
- 9) TORQUE MS21042L3 NUTS TO 20-25 in-lb (2.3-2.8 N-m)
- 10) ASSEMBLE D2690-11 WITH MS17984-C412 AS SHOWN

RELEASED
2016-06-29
EEN 16-579

APPROVED

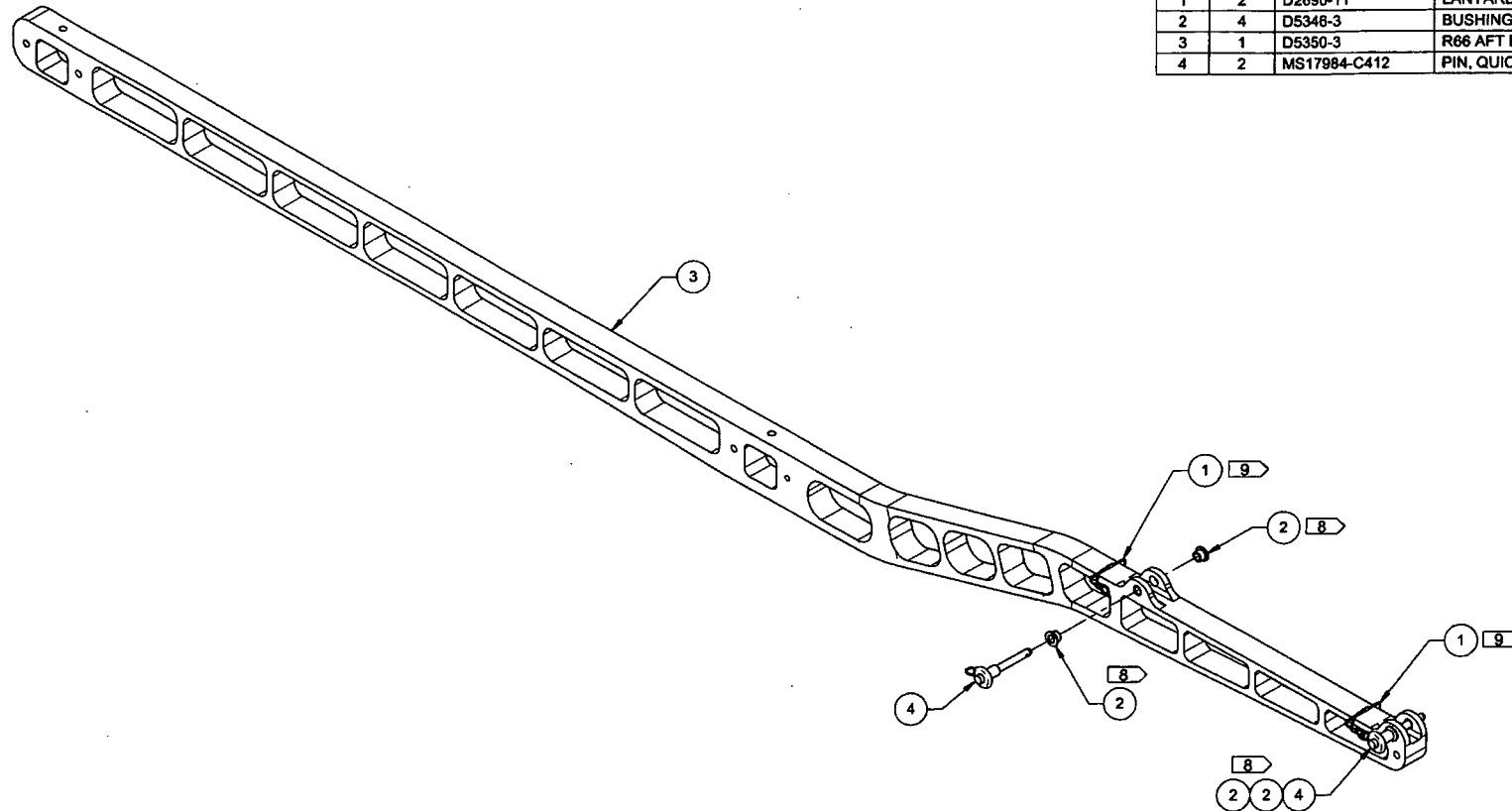
8	REDESIGN -1/3/-041/-043 (ZN A4-1, A4-2, A4-3, A4-4)	RF	16.05.24
A	NEW ISSUE	RF	15.08.10
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED	VS		
MFG. APPR.	RQ		
APPROVED	HS		
DE APPR.	OS		
DATE	16.05.24		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D5350** REV. B
SHEET 1 OF 4
TITLE **R66 BEAM ASSEMBLY** SCALE NTS

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ITEM	QTY -043	P/N	DESCRIPTION
	X	D5350-043	R66 AFT BEAM ASSEMBLY
1	2	D2690-11	LANYARD ASSEMBLY
2	4	D5346-3	BUSHING
3	1	D5350-3	R66 AFT BEAM
4	2	MS17984-C412	PIN, QUICK RELEASE



B D5350-043 R66 AFT BEAM ASSEMBLY

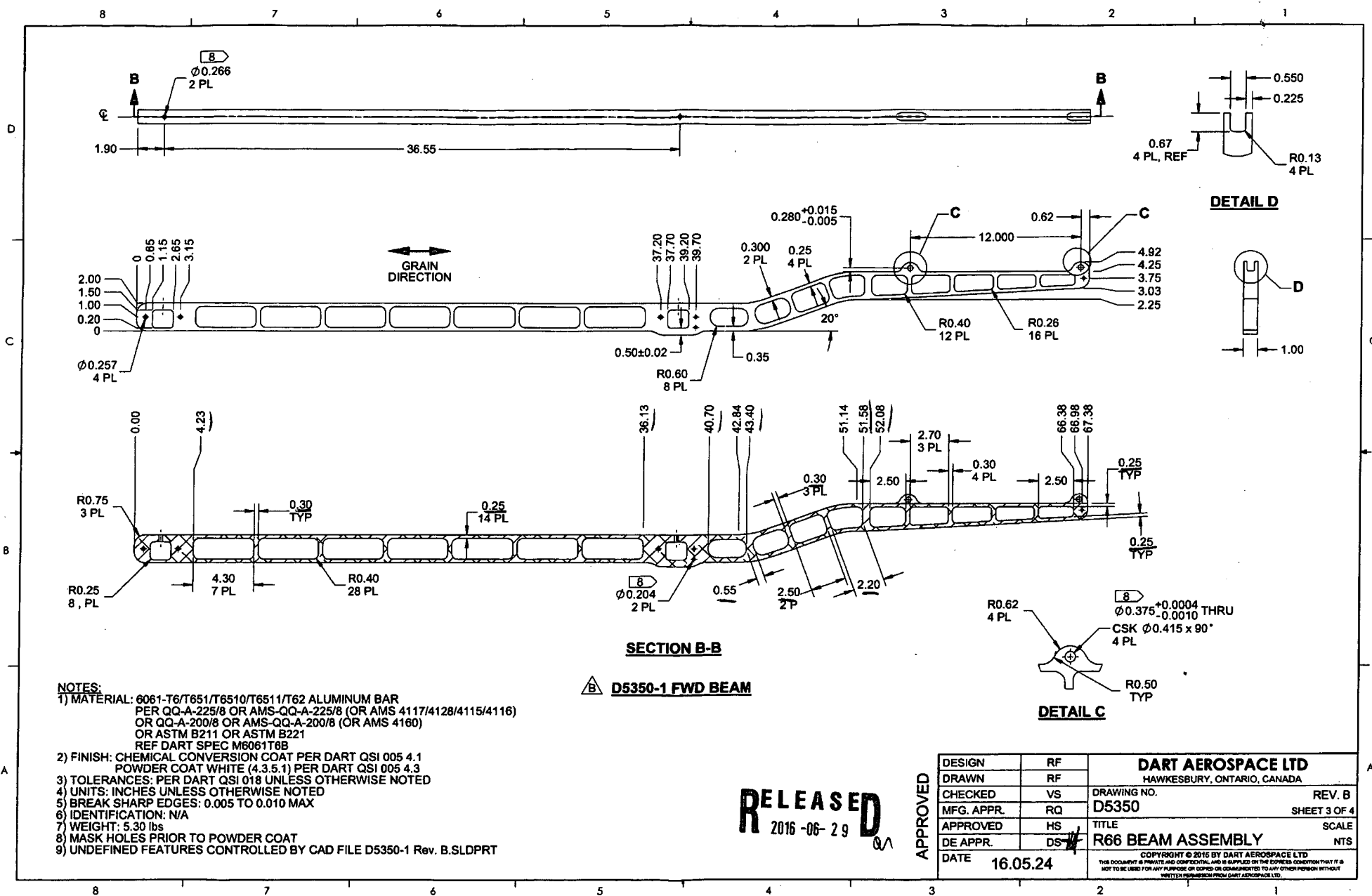
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 6.6 lbs
- 8) PRESS FIT D5346-3 INTO D5350-3
- 9) ASSEMBLE D2690-11 WITH MS17984-C412 AS SHOWN

RELEASED
2016-06-29

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	VS	DRAWING NO. D5350	REV. B
MFG. APPR.	RQ	SHEET 2 OF 4	
APPROVED	HS	TITLE R66 BEAM ASSEMBLY	SCALE NTS
DE APPR.	DS	COPYRIGHT © 2015 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	
DATE	16.05.24		



Jean-Luc Menard

From: David Shepherd
Sent: Monday, June 27, 2016 12:33 PM
To: Denis Maranda; Linda Lacelle; Jean-Luc Menard
Cc: Harvey Siemens; Bill Beckett; Kim Johnston; Roberto Fuentes; Patrick Smith
Subject: R66 Basket Parts Required

All,

While Harvey was on holiday, I worked with Roberto to try to move the R66 basket project forward.

The following drawings have recently been approved in the Vault and are on their way to Hawkesbury with ECN 16-579 for processing :

- 1) D5350 Rev B (R66 Beam Assy)
- 2) D5354 Rev B (R66 Fwd Clamp Assy)
- 3) D5355 Rev B (R66 Aft Clamp Assy)
- 4) D5445 Rev A (Cross Beam Assy)

To re-do the structural test, Roberto would like the following parts in Calgary:

Qty	Part Number	Notes
1	D5445-041	Powder Coat not required, D5445-043 End Caps not required
1	D5445-042	Powder Coat not required, D5445-043 End Caps not required
1	D5350-1	Powder Coat not required, Drill 0.375 holes to 0.257, OK to cut on waterjet
1	D5350-3	Powder Coat not required, Drill 0.375 holes to 0.257, OK to cut on waterjet
1	D5354-1	Anodize not required
1	D5354-2	Anodize not required
2	D5355-1	Anodize not required

Please provide us with a date as to when we can have these parts in Calgary so that we can resume our testing. We will need to receive the parts with a signed Conformity Inspection Record. We will send the draft Conformity Inspection Record closer to the parts being ready for shipping.

David (Roberto's scribe)

DART AEROSPACE LTD		Work Order:	148446
Description: Fwd Beam Assembly		Part Number:	5350-041
Inspection Dwg: 5350 Rev: B		Page 1 of 1	

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.25	+/- .030	.258	✓		V: a-02	
.30	+/- .030	.308	✓		Tape	
.55	+/- .030	.55	✓			
2.20	+/- .030	2.20	✓			
2.50	+/- .030	2.493	✓			
2.50	+/- .030	2.496	✓			
4.30	+/- .030	4.291	✓			
4.23	+/- .030	4.23	✓			
36.13	+/- .030	36.13	✓			
40.70	+/- .030	40.70	✓			
43.40	+/- .030	43.40	✓			
51.58	+/- .030	51.58	✓			
52.08	+/- .030	52.08	✓			
66.38	+/- .030	66.38	✓			
67.38	+/- .030	67.38	✓			
1.00	+/- .010	1.006	✓			
Ø 0.257	+/- .006	0.258	✓		Caliper	J.C.L. - 08
0.65	+/- 0.030	0.651	✓		↓	
3.15	+/- 0.030	3.151	✓			
37.20	+/- 0.030	37.190	✓		Tape	
39.70	+/- 0.030	39.690	✓		"	
0.20	+/- 0.030	0.200	✓		Caliper	JCL - 08
Ø 0.204	+/- .008	0.204	✓		"	
66.98	+/- 0.030	66.98	✓		Tape	
0.62	+/- 0.030	0.620	✓		Caliper	JCL - 08
12.000	+/- 0.010	12.000	✓		Tape	
Ø 0.266	+/- .006	0.266	✓		Caliper	JCL - 08
1.90	+/- 0.030	1.90	✓		Tape	
36.55	+/- 0.030	36.55	✓		"	
0.550	+/- 0.010	0.549	✓		Caliper	JCL - 08
0.225	+/- 0.010	0.223	✓		"	
0.67	+/- 0.030	0.673	✓		"	

Measured by:	DL	Checked by:		QC Inspector:	
Date:	16.10.08	Date:		Date:	

Engineering Approval: (If necessary)		Date:	
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Rev	Date	Change	Revised by	Approved
B	14.07.31	New Issue	KJ	

